The Prince of Darknet

Inside the high-tech bunker of the corporate spy who oversees the rippers, coding wizards and unrepentant scofflaws of the Internet movie underground.

By J.D. Lasica

The following account is an exclusive look inside the high-tech bunker of the corporate spy who oversees the rippers, coding wizards and unrepentant scofflaws of the Internet movie underground.

Bruce Forest rocks back in his office chair, convulsed in laughter at the latest attempt by federal agents to smash the pirates of Darknet. The U.S. Attorney General had just announced the FBI's latest crackdown on Internet piracy, this time against 7,000 members of the Underground Network who had been trading movies, songs, games and software over secret online networks.

Forest cradles his computer keyboard and taps out another scorching barb to his fellow renegades at the authorities' expense. "If the goal was to slow down file trading in the underground, then it failed completely," he tells me, running stubby fingers through a mop of unkempt brown hair as a one-carat champagne diamond stud earring gleams in his left earlobe. "The people they raided are nobodies — not even near the top. It's had no effect whatsoever on the scene."

The scene is the name insiders use for the vast, hidden file-trading underground. Outsiders sometimes call it the Darknet, for nearly all of this illicit activity takes place in the shadows. Either way, it's a domain Forest knows perhaps better than anyone.

Nearly every day, he holds forth under multiple identities as a master of the digital underworld. He does so from the home office of his ranch house in suburban Connecticut, a five-acre wooded tract that he and his family share with moose, fox, and a flock of guinea fowl that keep Lyme-carrying ticks under control. None of the residents suspects that their bucolic little town is home to the Prince of Darknet.

Forest belongs to several major movie piracy groups. He is also a channel operator on Internet Relay Chat on numerous piracy channels. Forest is in many ways the ultimate digital renegade, the kind of copyright-flouting, authority-taunting Young Turk who gives movie studio titans and record company executives the cold sweats.

Except for one thing: He is being paid to commit piracy by a major media company.

Forest is, in effect, working both sides of the fence. The underground movie groups do not know that he

is a full-time consultant for a well-known global entertainment conglomerate — it would be bad news for Forest (his real name) if his online identities were revealed. In turn, his corporate benefactor allows Forest to ply the piracy coves like a swashbuckling one-man Jolly Roger — swapping movie and music files, building up cred in the seamier corners of the Darknet — as a way to infiltrate and keep tabs on the illegal trading networks.

“I guess you can call me a true double agent,” says Forest, outfitted in jeans, casual nylon shirt, and tan socks. He stretches out his 5-foot-8 frame and perches his shoeless feet atop a desk. “I lead a very comfortable double life.”

Forest has become the eyes and ears of an industry that is ramping up plans to make sure the motion picture studios do not suffer the fate that has befallen the record labels. In November, the MPAA announced is intent to begin suing individuals who swap films over peer-to-peer networks. Movie executives worry that Hollywood could become the next modern-day Carthage as Internet connections become lightning-fast, computer hard drives bulk up in size, compression technologies improve, and P2P networks become harder to foil. The battle over movie piracy may prove to be even more fierce and intractable than the one being waged in the music world, given Hollywood’s formidable firepower on Capitol Hill and its presence in nearly every aspect of our celebrity-infused culture. While no one has yet shown a link between movie file sharing and a loss of revenue at the box office or at the video rental counter, Forrester Research estimates that one in five teenagers has illegally downloaded a feature film. Between 400,000 and 600,000 movies are already being illegally traded online every day, studio chieftains have said in Congressional testimony. Some 17 million pirated movie files now float around the Internet, according to research firm BigChampagne, the Nielsens of file trading.

Which brings us back to Forest, who seems to be close at hand — like a veritable Forrest Gump — whenever movies and Internet piracy intersect. It was Forest who came up with Hollywood’s estimate of movie piracy levels, a number he devised after staking out the darkened street corners of the movie underground one blockbuster weekend in May 2002 — the same weekend CNN shot footage of a silhouetted man downloading “Star Wars: Attack of the Clones.” (The shadowy figure was Forest.) When five of the major Hollywood studios unveiled Movielink, their Internet film rental service touted as an alternative to piracy, Forest was one of its key architects, and he owns a patent on the technology. Forest has just unveiled a new business model for digital distribution of music and movies. And when I wanted to interview leaders of the movie piracy underground for this article, it was Forest who successfully set the table for me.

“It has taken me years to build up the trust and respect of my peers,” he says in a breezy, broadband-fast delivery honed during a boyhood on the streets of Forest Hills, Queens. “You can’t just show up on a channel and say, ‘Hi, I’m new here and I want some of your movies.’ They will laugh at you, and then they’ll ban you. It’s rough frontier justice. You have to earn your way in by offering value to other members in the form of gear or coding talent or access to the newest, coolest material.”

Forest acknowledges that in 1997, as he was scratching his way up the piracy hierarchy, he joined his

first release group — clusters of individuals who work secretly in teams to illegally distribute digital goods in the Darknet. He started out as a "server," a low-level position he sardonically likens to a Mafia button man. A server is at greatest risk of criminal prosecution because he distributes infringing movie files on an open Internet address. Performing such yeoman's work offers advancement in the scene. (Not surprisingly, no one in the scene uses the term "pirate.")

Forest no longer serves, having parlayed his familiarity with the scene into a lucrative consulting business. "I don't do anything illegal," he tells me on more than one occasion. Yet, to prove his privacy chops and to maintain the trust he has gained in the movie underground, Forest shares with a few of his peers the password to his private server, a secret stash of digital goods accessible only by invitation. When I stop by later, I spy a treasure trove of copyrighted booty: thousands of songs, music videos, movie files, television shows (including every episode of *The Simpsons*), computer games for Microsoft's Xbox, and software programs that fill up 2 terabytes on his networked hard drives. (Comparisons can be misleading, but the entire Library of Congress is only 10 times larger. Forest's 2 terabytes would fill 1.4 million 3.5-inch floppy disks.) His online hideout includes the Billboard Top 100 of every hit song from the past 44 years and films such as *Spider-man, Gangs of New York, Gladiator, The Godfather II,* and *Austin Powers*.

Take what you want, he offers.

College students who run similar private file-sharing networks have been busted for less, but Forest does not fear the copyright cops. When he negotiated his contract, he insisted on an indemnification clause, a hold-harmless provision that shields him from being prosecuted for downloading pirated movies belonging to the major movie studios. He also consults for the music industry and has been indemnified by the Recording Industry Association of America. Forest may be a spy, but he is no snitch, and he takes pains to make clear that he will not fink on anyone in the scene.

Those encounters have come in the form of various personas. He maintains multiple identities, from an entry-level server to a powerful and petulant elder statesman, on different IRC channels as a way to expand his sphere of contacts. "I have different personas on every channel, so I have to be careful that I don't blow my cover," he says.

As a full-time consultant, he writes a 200-page report for his corporate client every two weeks in which he outlines his latest findings, charts levels of movie piracy and suggests strategies to protect the company's intellectual property. (Though his work chiefly concerns film piracy, he also tracks the file trading of television shows, music and computer games.)

Release groups and the scene have received little attention in the mainstream press for a simple reason: No participant wants to talk about it. Publicity attracts the attention of law enforcement. But the bulletproof Forest has no such reservations. He agreed to share the highlights of what he has observed during the three years he has infiltrated the darkest corners of the piracy underworld in return for a pledge to protect his online identities and a disclaimer that his personal views do not necessarily

represent those of his employer.

This is the first time he has taken a stranger on a tour of the digital badlands.

Most people associate the Internet with the candy-colored playground of the World Wide Web, but millions of others — geeks, college and high school students, hard-core pirates — navigate to other harbors on the Internet. The Darknet is cyberspace's equivalent of Al Capone country, a lawless, ethics-free frontier impervious even to a legion of industry lawyers. The Darknet is where epic battles over copy protection and file sharing will be joined.

Today, Forest has arranged for me to interview two leading figures in the Internet movie underground. The ground rules are simple. The interviews will be conducted over Apple's iChat, a software program that allows participants to type messages back and forth on screen. The connection is untraceable, thanks to the "bounces" both they and Forest have set up. They can see me through a Webcam, but I can't see them. "They want to make sure you're not wearing a uniform," Forest half-jokes.

The first underground figure I contact goes by the name of beneaththecobweb. Forest, who has known him for five years, says he is a member of nine movie release groups and heads up six of them. As such, he is one of the highest-ranking members of the scene. Forest describes him as a man in his late 20s from a western state. Beneaththecobweb will say only that he is a U.S. citizen and network administrator temporarily living in western Europe.

"The amazing part of the scene is that it represents an inner-circle … a place where people in hundreds of different countries connect, and work for a common purpose," beneaththecobweb tells me. The scene is all about giving people of every social class or budget equal access to great music and movies. Hollywood and the music industry must "adapt to changing times," he says.

The second figure takes the name Ninja. Forest tells me he is a college student on Long Island and a former high-level Internet pirate who left the scene not long ago after running three movie release groups and one music release group. Ninja says he was primarily drawn to the scene because of easy access to new Hollywood releases.

For the next three hours we trade messages about how the scene operates, while Forest tosses in running color commentary.

When copies of *The Incredibles, Terminator 3* or other major motion pictures appear on the Internet days or weeks before their theatrical release, it's almost certain that a movie release group was responsible. Although movie groups first appeared around 1997, the scene got a kick-start in late October 1999 when a Norwegian teenager wrote a few lines of code that made it easy to pluck a Hollywood movie from a copy-protected DVD. A typical release group, bearing names like Flair, Esoteric or Opium, consists of anywhere from a handful to as many as 30 individuals, with 15 members on average. Today there are an estimated 140 underground movie groups worldwide, up from 32 in

2002. Other release groups focus on games, software, television shows, even e-books.

Releasing a movie onto the Internet follows a process that beneaththecobweb likens to a factory assembly line. While decrypting, encoding, and distributing a single movie could be done by a single individual, the chore is sufficiently labor-intensive that it makes more sense to parcel out the duties to a team of specialists. And so an underground cottage industry was born.

To begin the process, release groups usually obtain the movies from a surprising source: Hollywood insiders. A study published by AT&T Labs in September 2003 found that 77 percent of the illegal movies on file-sharing networks come from people associated with the movie industry.

Films leak into the piracy pipeline in several ways. Most treasured is a copy of a master print obtained during a film's postproduction, when the shooting has been completed and hundreds of employees typically have access to the film master to make edits, adjust colors and sounds, add special effects, and perform other finishing touches. Equally tantalizing for the release groups are "screeners" released on DVD to a select group of viewers before a film opens in theaters. Another source is the pressing plant, where hundreds or thousands of discs with imperfections might be discarded months before a DVD's retail release. A "telesync" is created when a movie theater employee or his friends set up a camcorder on a tripod and videotape the film from the projection room. Most commonly, someone sneaks a camcorder into a theater and aims it at the screen, though such "screen cams" can produce images with jerky movements and shots of the back of patrons' heads. Still, the audio quality can be excellent; pirates can get good sound quality by plugging into jacks designed to help the hearing-impaired. (Not long ago, Los Angeles police arrested two eighteen-year-olds for videotaping *Star Trek: Nemesis* and a twenty-eight-year-old man for videotaping *The Passion of the Christ* in L.A. movie theaters.) The movie studios have lately tried to thwart screen cams by arming movie theater attendants with metal detectors and night-vision goggles to catch video operators *in flagrante cinema*. Another link in the chain is the video store employee who has access to DVDs after the film's theatrical release but a few days before their release to the public.

Let's follow the trajectory of a typical title through the movie underground. It begins with a *supplier*, usually someone who works at a production studio, DVD pressing plant, video store, or some organization with ties to the motion picture industry. The supplier hands off the unreleased or recently released film—say, a preview DVD of *Mission: Impossible 3*—to a contact in a release group or at a drop site. Next, the file is transported as quickly as possible to a ripper, or cracker, either by sending the DVD by Federal Express or by allowing the ripper to grab the file from his computer through a virtual private network connection. The ripper's task is to copy the movie's raw video and audio files and strip out any copy protection. Then he or an encoder edits out the identifying marks studios insert to track copies and also compresses and optimizes the video file into formats suitable for downloading and viewing on a computer or television screen. Next, a distributor places a file on one of 30 or so topsites—ultrasecure underground digital vaults. From there, *couriers* transfer the file to a lower-level dump site or to high-speed distribution servers (computers configured to share files). These members, skilled programmers who often double as university or corporate network aces, have access to powerful

computers with fast Internet connections. “Couriers are the drug mules of the distribution chain,” Forest says. The final link in the chain are the *channel operators*, who announce the movie’s availability on individual IRC channels like mongers at a fish market, setting off a feeding frenzy. (An estimated fifteen hundred IRC channels are devoted exclusively to movie piracy.) The entire process typically takes two to three days—with handoffs that often cross international borders.

“It’s the balance between Europeans, Americans, and Asians that makes it work across different time zones,” Ninja says. Forest adds: “I know of one group that has Belgian encoders, U.S. rippers, Asian hard goods people, and Canadian administrators.”

Much of this happens in a loose-knit fashion, with individuals working independently—usually late into the night—in cloistered bedrooms, college dorms, and offices rather than a central location. “Very few members have met each other” in person, beneaththecobweb notes. During all of this, *administrators* help the operation run smoothly, buying hardware, network bandwidth, or shell accounts on the computers that distribute the movie. One or two *group leaders* organize the entire enterprise. And then there are the *donators*, generally sympathetic, older benefactors who donate equipment, bandwidth, facilities, or funds to a release group in exchange for membership, community respect, and access to the group’s digital spoils at a “leech site.”

Forest is a donator, having supplied computers and camcorders to various release groups on his dime. Forest, who must have balls of silicon, deducts all such donations on his income tax return, saying, “I have an honest accountant. He said I can tax-deduct it as a legitimate business expense.”

Some groups specialize only in ripping or encoding, while others distribute the title, and still others handle all aspects of a release. Once released, a title filters out into Usenet news groups (go to Google, click on Groups, and you’re there) and the Web-based file-sharing services. The movie piracy network might be described best as an inverted pyramid, with a few thousand members of the elite release groups at the top; a wider group of 50,000 to 200,000 users who operate both public and private servers that store the digital goods; another 3.5 million tech-savvy users who swap files on IRC channels, news groups, and public FTP sites; and finally hundreds of millions of people worldwide—perhaps 60 million in the United States—who use peer-to-peer networks such as Kazaa, eDonkey, and iMesh. By the time a movie or song funnels down to the bottom of the pyramid, it may have picked up a virus, or it may be a bogus file. But the material at the very top is gold.

Standing atop the piracy pyramid are the technologically savvy men (and it is an overwhelmingly male enterprise) who seem to share a youthful swagger, a disregard for authority and a conviction that, as beneaththecobweb says, “everything” should be up on the Internet. Forest says of movie release groups: “Most members are guys in their late teens to early 20s. But I know one guy in his 60s who does this, and I know a 13-year-old in junior high school who’s one of the best coders I’ve ever seen. On the IRC channels you see a lot of adolescent interplay, with guys talking about girls and breast size, but when they start talking technology, they sound like Stephen Hawking.”

While some release groups aspire to be swiftest in releasing a title, other groups try to produce the best-looking digital fare. Two groups with reputations as the “class acts” of the movie underground are Centropy, known for its high-quality releases, and VCD Vault, whose mission is to convert movie classics from the 1940s to 1970s into a downloadable digital format. There’s a concerted effort under way to make available to the public any movie ever made. The undertaking even has a code name: the Netflix Project, named after the mail-order company with a catalog of 15,000 DVD titles. Dozens of release group members sign up for a Netflix account, which allows them to obtain as many DVDs as they want in a month. “I know people who have ripped 50 movies in a month from Netflix,” Forest says.

What motivates these young men is less a political movement or philosophical cause than a desire to belong to an edgy, secretive, forbidden brotherhood. And while zinging the Hollywood Goliath is satisfying in itself, at its rawest level the scene is a sporting competition between outsize egos. Whoever beats the opposing “teams” wins the challenge — and bragging rights.

Forest, who races a catamaran on water and Formula Dodge on land (he has survived two bad accidents), offers this take on the scene’s allure: “The little edge of danger involved is kind of cool. People like belonging to a tight-knit community. It just happens to be a community that skirts the law."

When I leave, Forest tells me, “I’m shocked they’ve told you as much as they have.”

(From Darknet: Hollywood's War Against the Digital Generation. You may copy excerpts from this entry to comment on or critique the work or to otherwise engage in fair use.)

Transparency notice: A longer version of this article was slated for publication in the New York Times Sunday Magazine late last year before the editors seemed to lose interest. I reworked it for *Legal Affairs*, and it appears in the current issue.

Also see:

• For the reaction of Jack Valenti and John G. Malcolm, the MPAA's head of worldwide anti-piracy operations, and for a fuller discussion of this topic, see "Darknet" the book.

• Transcript of IM chat with beneaththecobweb, the head of six major movie release groups.